



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/643,993 | 08/23/2000 | Magnus Oberg | 2466-69 | 3192 |

7590 11/06/2002

NIXON & VANDERHYE P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

TRAN, DZUNG D

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/643,993

Applicant(s)

OBERG ET AL.

Examiner

Dzung D Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on Amendment filed on 08/13/2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-32 and 46-49 is/are allowed.
- 6) ☒ Claim(s) 33,40-45,50 and 57-62 is/are rejected.
- 7) ☒ Claim(s) 34-39 and 51-56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. *This office action is responsive to the amendment filed on August 13 2002.*

Specification

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 33, 40, 50 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyauchi et al. U.S. patent no. 5,877,881.

Regarding claims 33 and 50, Horiuchi clearly discloses an optical WDM network comprising at least two nodes (figure 1, elements 1, 2) interconnected by a bi-directional optical link (figure 1, elements 7a, 7b, 7n, 7n+1 and 8a, 8b, ..8n, 8n+1), each node comprising at least two pairs of ordinary optical transmitters (figure 4, elements 101, 102) and ordinary optical receivers (figure 5, elements CH1, CH2), each pair including an ordinary optical transmitter and an ordinary optical receiver and a transmitter included E/O converter (figure 1, element 16) for receiving electrical signals and converting the receive electrical signals to optical signals and a receiver included O/E converter for receiving optical signals converting them to electrical signals.

Regarding claims 40 and 57, Horiuchi further discloses all the receiver connected to a single demultiplexer (figure 5, element 200).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 41-45 and 58-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi et al. U.S. patent no. 5,790,294 in view of Takehana et al. U.S. patent no. 6,081,359.

As per claims above, Horiuchi discloses all the limitation except for a switch provided to conduct an optical from the demultiplexer to at most of the ordinary receivers, and the optical signals issued by a spare transponder. Takehana in figure 3 clearly disclose an optical WDM network having transmitting system and receiving system, ordinary transponders (figure 3, elements 2-1, 2-2, 2-3, 2-4), each ordinary transponder receiving the issue first optical signals from only one of the ordinary optical transmitters of the pair and converting the receive signals to issue the second optical signals of the well defined wavelength band (figure 3, elements $\lambda_1, \lambda_2, \lambda_3, \lambda_4$) a first optical multiplexer (figure 3, element 8) connected to receive the second optical signal issued by the ordinary transponders of the node, the first optical multiplexer combining the second optical signals to issue a combined optical signal on an optical fiber. It would have been obvious to an artisan at the time of the invention was made to replace transmitting apparatus and receiving apparatus of Takehana with the transmitting

Art Unit: 2633

equipment and receiving equipment of Horiuchi in order to obtain a reliability optical system.

6. Claims 34-39 and 51-56 are objected to as being dependent upon the rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.

7. Claims 29-32 and 46-49 are allowed.

Response to Arguments

8. Applicant's arguments with respect to claims 33-45 and 50-62 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2633

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

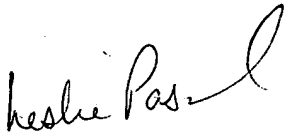
- a. Sutter et al. U.S. patent no. 5,760,934. Ring network for transmitting wavelength multiplexed informations
- b. Mestdagh et al. U.S. patent no. 5,299,293. Protection arrangement for an optical transmitter/receiver device
- c. Harano U.S. patent no. 5,943,146. Optical transmission system

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (703) 305-0932.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (703) 305-4729.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


LESLIE PASCAL
PRIMARY EXAMINER